



SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application
COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: VARIANT TLR4 NUCLEIC ACID AND USES THEREOF.

The specification of which was filed on December 7, 2001 as application serial no. 10/010,066.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. §1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Number
09/329,515
PCT/US00/15723

Filing Date
June 10, 1999
June 8, 2000

Status
Pending
Complete

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Anglin, J. Michael	Reg. No. 24,916	Greaves, John N.	Reg. No. 40,362	Nama, Kash	Reg. No. 44,255
Aronoff, Marvin S.	Reg. No. 35,052	Haack, John L.	Reg. No. 36,154	Nelson, Albin J.	Reg. No. 28,650
Arora, Suneel	Reg. No. 42,267	Harris, Robert J.	Reg. No. 37,346	Nicholson, Lea A.	Reg. No. 48,346
Beekman, Marvin L.	Reg. No. 38,377	Jackson Huebsch, Katharine A.	Reg. No. 47,670	Nielsen, Walter W.	Reg. No. 25,539
Berdie, Raymond R.	Reg. No. 50,769	Jurkovich, Patti J.	Reg. No. 44,813	Padys, Danny J.	Reg. No. 35,635
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.	Reg. No. 37,650	Parker, J. Kevin	Reg. No. 33,024
Billion, Richard E.	Reg. No. 32,836	Klima-Silberg, Catherine I.	Reg. No. 40,052	Perdok, Monique M.	Reg. No. 42,989
Black, David W.	Reg. No. 42,331	Kluth, Daniel J.	Reg. No. 32,146	Peret, Andrew R.	Reg. No. 41,246
Brennan, Thomas F.	Reg. No. 35,075	Lacy, Rodney L.	Reg. No. 41,136	Peterson, David C.	Reg. No. 47,857
Brooks, Edward J., III	Reg. No. 40,925	Lemaire, Charles A.	Reg. No. 36,198	Prout, William F.	Reg. No. 33,995
Chadwick, Robin A.	Reg. No. 36,477	LeMoine, Dana B.	Reg. No. 40,062	Schumm, Sherry W.	Reg. No. 39,422
Clark, Barbara J.	Reg. No. 38,107	Lundberg, Steven W.	Reg. No. 30,568	Schwegman, Micheal L.	Reg. No. 25,816
Clise, Timothy B.	Reg. No. 40,957	Maki, Peter C.	Reg. No. 42,832	Scott, John C.	Reg. No. 38,613
Cochran, David R.	Reg. No. 46,632	Malen, Peter L.	Reg. No. 44,894	Speier, Gary J.	Reg. No. 45,458
Dahl, John M.	Reg. No. 44,639	Mates, Robert E.	Reg. No. 35,271	Steffey, Charles E.	Reg. No. 25,179
Drake, Eduardo E.	Reg. No. 40,594	McCrackin, Ann M.	Reg. No. 42,858	Stordal, Leif T.	Reg. No. 46,251
Embretson, Janet E.	Reg. No. 39,665	McTavish, Hugh E.	Reg. No. 48,341	Terry, Kathleen R.	Reg. No. 31,884
Forrest, Bradley A.	Reg. No. 30,837	Mehrle, Joseph P.	Reg. No. 45,535	Tong, Viet V.	Reg. No. 45,416
Gamon, Owen J.	Reg. No. 36,143	Moore, Charles L., Jr.	Reg. No. 33,742	Viksnins, Ann S.	Reg. No. 37,748
Gorrie, Gregory J.	Reg. No. 36,530	Muller, Mark V.	Reg. No. 37,509	Woessner, Warren D.	Reg. No. 30,440
Gortych, Joseph E.	Reg. No. 41,791				

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to Schwegman, Lundberg, Woessner & Kluth, P.A. at the address indicated below:
P.O. Box 2938, Minneapolis, MN 55402
Telephone No. (612)373-6900

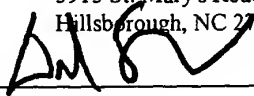
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1 : David A. Schwartz

Citizenship: United States of America

Residence: Hillsborough, NC

Post Office Address: 5915 St. Mary's Road
Hillsborough, NC 27278

Signature: 
David A. Schwartz

Date: 4/16/02

Full Name of joint inventor number 2 : Brian C. Schutte

Citizenship: United States of America

Residence: Iowa City, IA

Post Office Address: 3378 Lower West Branch Rd.
Iowa City, IA 52245

Signature: Brian C. Schutte

Date: _____

☒ Additional inventors are being named on separately numbered sheets, attached hereto.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 3 : Eva Lorenz
Citizenship: United States of America
Post Office Address: 33 Willow Bridge Drive
Durham, NC 27707

Residence: Durham, NC,

Signature: _____

Eva Lorenz

Date: _____

Full Name of inventor:
Citizenship:
Post Office Address:

Residence:

Signature: _____

Date: _____

Full Name of inventor:
Citizenship:
Post Office Address:

Residence:

Signature: _____

Date: _____

Full Name of inventor:
Citizenship:
Post Office Address:

Residence:

Signature: _____

Date: _____

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.



SCHWEGMAN ■ LUNDBERG ■ WOESSNER ■ KLUTH

United States Patent Application
COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that

I verily believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **VARIANT TLR4 NUCLEIC ACID AND USES THEREOF.**

The specification of which was filed on December 7, 2001 as application serial no. 10/010,066.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. § 1.56 (attached hereto). I also acknowledge my duty to disclose all information known to be material to patentability which became available between a filing date of a prior application and the national or PCT international filing date in the event this is a Continuation-In-Part application in accordance with 37 C.F.R. § 1.63(e).

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

No such claim for priority is being made at this time.

I hereby claim the benefit under 35 U.S.C. § 120 or 365(c) of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

<u>Application Number</u>	<u>Filing Date</u>	<u>Status</u>
09/329,515	June 10, 1999	Pending
PCT/US00/15723	June 8, 2000	Complete

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Anglin, J. Michael	Reg. No. 24,916	Greaves, John N.	Reg. No. 40,362	Nama, Kash	Reg. No. 44,255
Aronoff, Marvin S.	Reg. No. 35,052	Haack, John L.	Reg. No. 36,154	Nelson, Albin J.	Reg. No. 28,650
Arora, Suneel	Reg. No. 42,267	Harris, Robert J.	Reg. No. 37,346	Nicholson, Lea A.	Reg. No. 48,346
Beckman, Marvin L.	Reg. No. 38,377	Jackson Huebsch, Katharine A.	Reg. No. 47,670	Nielsen, Walter W.	Reg. No. 25,539
Berdie, Raymond R.	Reg. No. 50,769	Jurkovich, Patti J.	Reg. No. 44,813	Padys, Danny J.	Reg. No. 35,635
Bianchi, Timothy E.	Reg. No. 39,610	Kalis, Janal M.	Reg. No. 37,650	Parker, J. Kevin	Reg. No. 33,024
Billion, Richard E.	Reg. No. 32,836	Klima-Silberg, Catherine I.	Reg. No. 40,052	Perdok, Monique M.	Reg. No. 42,989
Black, David W.	Reg. No. 42,331	Kluth, Daniel J.	Reg. No. 32,146	Peret, Andrew R.	Reg. No. 41,246
Brennan, Thomas F.	Reg. No. 35,075	Lacy, Rodney L.	Reg. No. 41,136	Peterson, David C.	Reg. No. 47,857
Brooks, Edward J., III	Reg. No. 40,925	Lemaire, Charles A.	Reg. No. 36,198	Prout, William F.	Reg. No. 33,995
Chadwick, Robin A.	Reg. No. 36,477	LeMoine, Dana B.	Reg. No. 40,062	Schumm, Sherry W.	Reg. No. 39,422
Clark, Barbara J.	Reg. No. 38,107	Lundberg, Steven W.	Reg. No. 30,568	Schwegman, Micheal L.	Reg. No. 25,816
Clise, Timothy B.	Reg. No. 40,957	Maki, Peter C.	Reg. No. 42,832	Scott, John C.	Reg. No. 38,613
Cochran, David R.	Reg. No. 46,632	Malen, Peter L.	Reg. No. 44,894	Speier, Gary J.	Reg. No. 45,458
Dahl, John M.	Reg. No. 44,639	Mates, Robert E.	Reg. No. 35,271	Steffey, Charles E.	Reg. No. 25,179
Drake, Eduardo E.	Reg. No. 40,594	McCrackin, Ann M.	Reg. No. 42,858	Stordal, Leif T.	Reg. No. 46,251
Embretson, Janet E.	Reg. No. 39,665	McTavish, Hugh E.	Reg. No. 48,341	Terry, Kathleen R.	Reg. No. 31,884
Forrest, Bradley A.	Reg. No. 30,837	Mehrle, Joseph P.	Reg. No. 45,535	Tong, Viet V.	Reg. No. 45,416
Gamon, Owen J.	Reg. No. 36,143	Moore, Charles L., Jr.	Reg. No. 33,742	Viksmins, Ann S.	Reg. No. 37,748
Grorie, Gregory J.	Reg. No. 36,530	Muller, Mark V.	Reg. No. 37,509	Woessner, Warren D.	Reg. No. 30,440
Gortych, Joseph E.	Reg. No. 41,791				

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/organization/who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Schwegman, Lundberg, Woessner & Kluth, P.A. to the contrary.

Please direct all correspondence in this case to **Schwegman, Lundberg, Woessner & Kluth, P.A.** at the address indicated below:

P.O. Box 2938, Minneapolis, MN 55402
Telephone No. (612)373-6900

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 1 : **David A. Schwartz**

Citizenship: **United States of America**

Residence: **Hillsborough, NC**

Post Office Address: **5915 St. Mary's Road**
Hillsborough, NC 27278

Signature: _____
David A. Schwartz

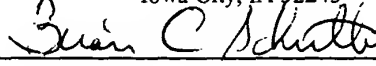
Date: _____

Full Name of joint inventor number 2 : **Brian C. Schutte**

Citizenship: **United States of America**

Residence: **Iowa City, IA**

Post Office Address: **3378 Lower West Branch Rd.**
Iowa City, IA 52245

Signature: 
Brian C. Schutte

Date: **5-17-02**

☒ Additional inventors are being named on separately numbered sheets, attached hereto.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of joint inventor number 3: Eva Lorenz Winston-Salem NC
Citizenship: United States of America Residence: Durham, NC, 6
Post Office Address: 33 Willow Bridge Drive 1601 Park Terrace Ln 6
Durham, NC 27707 Winston-Salem NC 27127 6

Signature: Eva Lorenz Date: 4/18/02
Eva Lorenz

Full Name of inventor:
Citizenship: Residence:
Post Office Address:

Signature: _____ Date: _____

Full Name of inventor:
Citizenship: Residence:
Post Office Address:

Signature: _____ Date: _____

Full Name of inventor:
Citizenship: Residence:
Post Office Address:

Signature: _____ Date: _____

§ 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.